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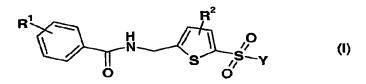
## **Claims**

Use of a sulfonamide derivative according to formula I

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as well as its geometrical isomers, its optically active forms as enantiomers, diastereomers and its racemate forms, as well as pharmaceutically acceptable salts thereof, wherein

Y is an 4-12-membered saturated cyclic or bicyclic alkyl containing at least one nitrogen atom, whereby one nitrogen atom within said ring is forming a bond with the sulfonyl group of formula I thus providing the sulfonamide;

10 R<sup>1</sup> is selected from the group comprising or consisting of hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl, amino, sulfanyl, sulfinyl, sulfonyl, sulfonyl, sulfonyloxy, sulfonamide, acylamino, aminocarbonyl, C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl, aryl, heteroaryl, carboxy, cyano, halogen, hydroxy, nitro, hydrazides;

R<sup>2</sup> is selected from the group comprising or consisting of hydrogen, COOR<sup>3</sup>, - CONR<sup>3</sup>R<sup>3'</sup>, OH, a C<sub>1</sub>-C<sub>4</sub> alkyl substituted with an OH or amino group, a hydrazido carbonyl group, a sulfate, a sulfonate, an amine or an ammonium salt;

with  $R^3$ ,  $R^{3'}$  being substituents independently selected from the group consisting of H,  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl, aryl, heteroaryl, aryl- $C_1$ - $C_6$ -alkyl, heteroaryl- $C_1$ - $C_6$ -alkyl;

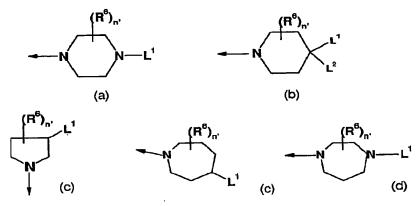
for the preparation of a medicament for the treatment of metabolic disorders mediated by insulin resistance or hyperglycemia, comprising diabetes type II, inadequate glucose tolerance, insulin resistance, obesity, polycystic ovary syndrome (PCOS).

2. Use according to claim 1, wherein the disease is diabetes type II.

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3. Use according to claim 1 or 2, wherein R<sup>1</sup> is selected from the group consisting of hydrogen, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl or C<sub>1</sub>-C<sub>6</sub> alkoxy.

4. Use according to any of claims 1 to 3, wherein Y is either of the cyclic amines having the general formulae



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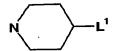
whereby,  $L^1$  and  $L^2$  are independently selected from each other from the group consisting of  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkynyl,  $C_4$ - $C_8$ -cycloalkyl optionally containing 1-3 heteroatoms and optionally fused with aryl or heteroaryl; or  $L^1$  and  $L^2$  are independently selected from the group consisting of aryl, heteroaryl, aryl- $C_1$ - $C_6$ -alkyl, heteroaryl- $C_1$ - $C_6$ -alkyl, -C(O)- $OR^3$ , -C(O)- $R^3$ , -C(O)- $R^3$ , - $R^3$ - $R^3$ , - $R^3$ -

with  $R^3$ ,  $R^{3'}$  being substituents independently selected from the group consisting of H,  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl, aryl, heteroaryl, aryl- $C_1$ - $C_6$ -alkyl, heteroaryl- $C_1$ - $C_6$ -alkyl;

or L<sup>1</sup> and L<sup>2</sup> taken together form a 4-8-membered, saturated cyclic alkyl or heteroalkyl group; and

 $R^6$  is selected from the group consisting of hydrogen,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -alkoxy, OH, halogen, nitro, cyano, sulfonyl, oxo (=O), and n' is an integer from 0 to 4, preferably 1 or 2.

- 5. Use according to claim 4, wherein R<sup>6</sup> is H, L<sup>2</sup> is H, L<sup>1</sup> is -NR<sup>3</sup> R<sup>3</sup>; where at least one of R<sup>3</sup> and R<sup>3</sup> is not hydrogen, but a substituent selected from the group consisting of straight or branched C<sub>4</sub>-C<sub>18</sub>-alkyl, aryl-C<sub>1</sub>-C<sub>18</sub>-alkyl, heteroaryl-C<sub>2</sub>-C<sub>18</sub>-alkyl, C<sub>1</sub>-C<sub>14</sub>-alkyl substituted with a C<sub>3</sub>-C<sub>12</sub>-cycloalkyl or -bicyclo or -tricyloalkyl, and whereby said alkyl chain may contain 1-3 O or S atoms.
- 6. Use according to claim 5, wherein L<sup>1</sup> is -NHR<sup>3</sup>; where R<sup>3</sup> is a straight or branched C<sub>4</sub>-C<sub>12</sub>-alkyl, preferably a C<sub>6</sub>-C<sub>12</sub>-alkyl, optionally substituted with a cyclohexyl group or a benzyl group.
- 7. Use according to claim 4, wherein Y is a piperidine group



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- $L^1$  is -NHR<sup>3</sup>; where R<sup>3</sup> is a straight or branched C<sub>4</sub>-C<sub>12</sub>-alkyl, preferably a C<sub>8</sub>-C<sub>12</sub>-alkyl, or a benzyl group.
- 8. Use according to any of the preceding claims wherein the compound is selected from the group consisting of:
- 4-chloro-N-[5-(piperazine-1-sulfonyl)-thiophen-2-yl-methyl]-benzamide
  - 4-Chloro-N-{5-[4-(3-trifluoromethanesulfonyl-phenylamino)-piperidine-1-sulfonyl]-thiophen-2-ylmethyl}-benzamide
  - $4-chloro-N-(\{5-[(4-pyridin-2-ylpiperazin-1-yl)sulfonyl] thien-2-yl\} methyl) benzamide \\$
  - 4-chloro-N-[(5-{[4-(4-fluorobenzoyl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 4-chloro-N-{[5-({4-[4-(trifluoromethyl)phenyl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

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- 4-chloro-N-({5-[(4-{2-nitrophenyl}piperazin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
- 5 4-chloro-N-[(5-{[4-(2-furoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 4-chloro-N-[(5-{[4-(4-hydroxyphenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide\_
  - $\label{lem:condition} $$4-chloro-N-[(5-\{[4-(2-oxo-2-pyrrolidin-1-ylethyl)piperazin-1-yl]sulfonyl\}$ thien-2-yl) methyl] benzamide$
- 4-chloro-N-[(5-{[4-(2-morpholin-4-yl-2-oxoethyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 4-chloro-N-[(5-{[4-(pyridin-4-ylmethyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- 4-chloro-N-[(5-{[4-(2-thien-2-ylethyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $\label{thm:condition} $$4$-chloro-N-[(5-\{[4-(3,5-dimethoxyphenyl)piperazin-1-yl]sulfonyl\}$ thien-2-yl) methyl] benzamide$
  - $\label{lem:chloro-N-[(5-{[4-(cyclohexylmethyl)piperazin-1-yl]sulfonyl} thien-2-yl) methyl] benzamide} \\$
- 20 4-chloro-N-[(5-{[4-(2-methoxyphenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $N-(\{5\hbox{-}[(4\hbox{-}benzylpiperazin-1-yl)sulfonyl]thien-2-yl\} methyl)-4\hbox{-}chlorobenzamide$

 $\label{lem:chloro-N-[(5-{[4-(2-phenylethyl)piperazin-1-yl]sulfonyl})} thien-2-yl) methyl] benzamide$ 

4-chloro-N-[(5-{[4-(4-fluorobenzyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

5 4-chloro-N-[(5-{[4-(2-cyanophenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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4-chloro-N-[(5-{[4-(3-piperidin-1-ylpropyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:chloro-N-(5-[(4-\{4-chloro-2-nitrophenyl\}piperazin-1-yl)sulfonyl]thien-2-yl} methyl) benzamide$ 

 $\label{lem:condition} $$4-chloro-N-[(5-\{[4-(6-methylpyridin-2-yl)piperazin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide$ 

4-chloro-N-({5-[(4-hydroxy-4-phenylpiperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-(\{5\hbox{-}[(4\hbox{-}benzoylpiperidin-1-yl)sulfonyl]thien-2-yl\} methyl)-4\hbox{-}chlorobenzamide$ 

 $\label{lem:chloro-N-[(5-\{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]sulfonyl} \ thien-2-yl) methyl] benzamide$ 

N-({5-[(4-benzylpiperidin-1-yl)sulfonyl]thien-2-yl}methyl)-4-chlorobenzamide

4-chloro-N-({5-[(4-oxo-1-phenyl-1,3,8-triazaspiro[4.5]dec-8-yl)sulfonyl]thien-2-yl}methyl)benzamide

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4-chloro-N-{[5-({4-[2-(methylanilino)-2-oxoethyl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[hydroxy(diphenyl)methyl]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

5 4-chloro-N-[(5-{[4-(3-cyanopyrazin-2-yl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-({5-[(4-{5-nitropyridin-2-yl}piperazin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-chloro-N-{[5-({4-[3-chloro-5-(trifluoromethyl)pyridin-2-yl]piperazin-1-10 yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[5-(trifluoromethyl)pyridin-2-yl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[3-(trifluoromethyl)pyridin-2-yl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-[(5-{[4-(2,4-difluorobenzoyl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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methyl  $5-\{4-[(5-\{[(4-chlorobenzoyl)amino]methyl\}thien-2-yl)sulfonyl]piperazin-1-yl\}-7-(trifluoromethyl)thieno[3,2-b]pyridine-3-carboxylate$ 

ethyl 2-{4-[(5-{[(4-chlorobenzoyl)amino]methyl]thien-2-yl)sulfonyl]piperazin-1-yl}-5-cyano-6-methylnicotinate

4-chloro-N-{[5-({4-[5-cyano-4,6-bis(dimethylamino)pyridin-2-yl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[6-methyl-2-(trifluoromethyl)quinolin-4-yl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $tert-butyl\ 4-[(5-\{[(4-chlorobenzoyl)amino]methyl\}thien-2-yl)sulfonyl]piperazine-1-carboxylate$ 

5 2-{4-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperazin-1-yl}-8-ethyl-5-oxo-5,8-dihydropyrido[2,3-d]pyrimidine-6-carboxylic acid

7-{4-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperazin-1-yl}-1-ethyl-6-fluoro-4-oxo-1,4-dihydro[1,8]naphthyridine-3-carboxylic acid

7-{4-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperazin-1-yl}-1-10 ethyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid

4-chloro-N-[(5-{[4-(2,3-dihydro-1,4-benzodioxin-2-ylcarbonyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:condition} $$4-$ chloro-N-{[5-({4-[(2E)-3-phenylprop-2-enyl]piperazin-1-yl}sulfonyl)thien-2-yl] methyl} benzamide$ 

4-chloro-N-[(5-{[4-(3-phenylpropyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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 $\label{lem:condition} \begin{tabular}{ll} $4$-chloro-N-[(5-\{[4-(3,4,5-trimethoxyphenyl)piperazin-1-yl]sulfonyl]$ thien-2-yl)methyl] benzamide \end{tabular}$ 

N-[(5-{[4-(4-tert-butylbenzyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide

4-chloro-N-[(5-{[4-(4-fluorophenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

- 4-chloro-N-[(5-{[4-(2-hydroxyphenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- 5 4-chloro-N-[(5-{[4-(5-cyanopyridin-2-yl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $tert-butyl \ 1-[(5-\{[(4-chlorobenzoyl)amino]methyl\}thien-2-yl)sulfonyl]piperidin-4-ylcarbamate$
  - $\hbox{$4$-chloro-N-(\{5-[(4-phenylpiperazin-1-yl)sulfonyl]$ thien-2-yl}$ methyl) benzamide \\$
- 10 4-chloro-N-{[5-(piperidin-1-ylsulfonyl)thien-2-yl]methyl}benzamide

- $\textbf{4-chloro-N-[(5-\{[4-(1-naphthyl)piperazin-1-yl]sulfonyl\}thien-2-yl)} methyl] benzamide \\$
- 4-chloro-N-[(5-{[4-(3,4-dichlorophenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- 4-chloro-N-{[5-({4-[3-(trifluoromethyl)phenyl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
  - 4-chloro-N-{[5-({3-hydroxy-4-[3-(trifluoromethyl)phenyl]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
  - $\label{lem:chloro-N-[(5-{[4-(2-methylphenyl)piperazin-1-yl]} sulfonyl} thien-2-yl) methyl] benzamide$
- N-[(5-{[(1R,4R)-5-benzyl-2,5-diazabicyclo[2.2.1]hept-2-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide
  - $N-[(5-\{[4-(benzyloxy)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-chlorobenzamide$

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4-chloro-N-[(5-{[4-(2-chlorodibenzo[b,f][1,4]oxazepin-11-yl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-(4-chlorophenyl)-2-(5-\{[4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl]sulfonyl\} thien-2-yl) acetamide$ 

- 5 4-chloro-N-({5-[(4-hydroxypiperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
  - $N-[(5-\{[4-(4-acetylphenyl)piperazin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-chlorobenzamide$
  - $\label{lem:condition} $$4$-chloro-N-[(5-{[4-(3,5-dichloropyridin-4-yl)piperazin-1-yl]sulfonyl}$ thien-2-yl) methyl] benzamide$
- 4-chloro-N-[(5-{[4-(3-methoxyphenyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $N-(\{5-[(4-benzyl-4-hydroxypiperidin-1-yl)sulfonyl]thien-2-yl\} methyl)-4-chlorobenzamide$
- N-{[5-({4-[(2-tert-butyl-1H-indol-5-yl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-4-chlorobenzamide
  - 4-chloro-N-{[5-({4-[(phenylacetyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
- 4-chloro-N-[(5-{[4-(6-chloropyridin-2-yl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $\label{lem:condition} $$4$-chloro-N-[(5-\{[4-(4-chlorophenyl)piperazin-1-yl]sulfonyl}]$ thien-2-yl) methyl] benzamide$

N-[(5-{[4-(2H-1,2,3-benzotriazol-2-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide

 $\label{lem:chloro-N-(5-{[4-(4-chlorobenzoyl)piperidin-1-yl]sulfonyl} thien-2-yl) methyl] benzamide$ 

5 4-chloro-N-({5-[(4-phenoxypiperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-\{[5-(\{4-[benzyl(methyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-4-chlorobenzamide$ 

4-chloro-N-[(5-{[4-(5-thien-2-yl-1H-pyrazol-3-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:condition} $$4-chloro-N-[(5-\{[4-(2,3,4,5,6-pentamethylbenzoyl)piperidin-1-yl]sulfonyl}$ thien-2-yl) methyl] benzamide$ 

4-chloro-N-[(5-{[4-(phenylacetyl)-1,4-diazepan-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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4-chloro-N-{[5-({4-[5-(4-methoxyphenyl)-1H-pyrazol-3-yl]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-(\{5-[(4-anilinopiperidin-1-yl)sulfonyl]thien-2-yl\} methyl)-4-chlorobenzamide$ 

4-chloro-N-[(5-{[4-(3-phenyl-1,2,4-thiadiazol-5-yl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[4-(2-phenylethyl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-({5-[(4-heptylpiperazin-1-yl)sulfonyl]thien-2-yl)methyl)benzamide

- $\hbox{$4$-chloro-N-(\{5-[(4-octylpiperazin-1-yl)sulfonyl]$ thien-2-yl}$ methyl) benzamide \\$
- N-[(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide
- 2-(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)-N-(4-chlorophenyl)acetamide
  - 2-{1-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperidin-4-yl}-2H-1,2,3-benzotriazole-5-carboxylic acid
  - 4-chloro-N-[(5-{[4-(5-chloro-1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- methyl 1-{1-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperidin-4-yl}-1H-1,2,3-benzotriazole-5-carboxylate
  - methyl 1- $\{1-[(5-\{[(4-chlorobenzoyl)amino]methyl\}thien-2-yl)sulfonyl]piperidin-4-yl\}-1H-1,2,3-benzotriazole-6-carboxylate$
- methyl 2-{1-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperidin-4yl}-2H-1,2,3-benzotriazole-5-carboxylate
  - $\label{lem:chloro-N-[(5-{[4-(6-chloro-1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl} thien-2-yl) methyl] benzamide$
  - $\label{lem:condition} $$4-chloro-N-\{[5-(\{4-[5-(trifluoromethyl)-1H-1,2,3-benzotriazol-1-yl]piperidin-1-yl\}sulfonyl) thien-2-yl]methyl\}benzamide$
- N-[(5-{[4-(7-aza-1H-benzimidazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide
  - $1-\{1-[(5-\{[(4-chlorobenzoyl)amino]methyl\}thien-2-yl)sulfonyl]piperidin-4-yl\}-1H-1,2,3-benzotriazole-5-carboxylic acid$

1-{1-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperidin-4-yl}-1H-1,2,3-benzotriazole-6-carboxylic acid

 $N-[(5-\{[4-(2-amino-9H-purin-9-yl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-chlorobenzamide$ 

5 4-chloro-N-[(5-{[4-(9H-purin-9-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-[(5-\{[4-(6-amino-9H-purin-9-yl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-chlorobenzamide$ 

4-chloro-N-({5-[(4-{6-nitro-1H-benzimidazol-1-yl}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $\label{lem:condition} $$4$-chloro-N-({5-[(4-{5-nitro-1H-benzimidazol-1-yl}piperidin-1-yl)sulfonyl]thien-2-yl}methyl) benzamide$ 

 $\label{lem:condition} $$4$-chloro-N-[(5-\{[4-(2H-1,2,3-triazol-2-yl)piperidin-1-yl]sulfonyl}$ thien-2-yl)methyl] benzamide$ 

N-[(5-{[4-(1H-benzimidazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide

4-chloro-N-{[5-({4-[3-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

methyl 3-({1-[(5-{[(4-chlorobenzoyl)amino]-methyl}thien-2-yl)sulfonyl]-piperidin-4-yl}amino)-benzoate

5 4-chloro-N-({5-[(4-{3-nitroanilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-chloro-N-[(5-{[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

3-({1-[(5-{[(4-chlorobenzoyl)amino]methyl}thien-2-yl)sulfonyl]piperidin-4-10 yl}amino)benzamide

 $\label{lem:condition} $$4$-chloro-N-\{[5-(\{4-[2-(trifluoromethyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl} benzamide$ 

 $\label{lem:condition} $$4-chloro-N-(\{5-[(4-\{2-nitro-4-[(trifluoromethyl)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\\methyl)benzamide$ 

4-chloro-N-[(5-{[4-(4-chloroanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:chloro-N-{[5-({4-[4-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl} benzamide$ 

4-chloro-N-({5-[(4-{4-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-chloro-N-({5-[(4-{2-nitroanilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-\{[5-(\{4-[4-(aminocarbonyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-4-chlorobenzamide$ 

 $\label{lem:chloro-N-{[5-({4-[4-(1,3-dithiolan-2-yl)anilino]} piperidin-1-yl)sulfonyl)} thien-2-yl] methyl} benzamide$ 

5 N-[(5-{[4-(3-chloroanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

 $\label{lem:condition} $$4$-chloro-N-[(5-\{[4-(3-chloroanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]$$benzamide$ 

4-chloro-N-[(5-{[4-(3-methoxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-(\{5-[(4-\{3-[amino(imino)methyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-4-chlorobenzamide$ 

4-chloro-N-({5-[(4-{3-[(2-hydroxyethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-[(5-\{[4-(2-aminoanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-chlorobenzamide$ 

4-chloro-N-[(5-{[4-(2-hydroxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[4-(4-hydroxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

- 4-chloro-N-({5-[(4-{3-[(trifluoromethyl)sulfanyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
- 4-chloro-N-[(5-{[4-(3-toluidino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- 4-chloro-N-({5-[(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
  - 4-chloro-N-{[5-({4-[3-(1,3-oxazol-5-yl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
  - N-[(5-{[4-(3-tert-butylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide
- 4-chloro-N-[(5-{[4-(2-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $\label{lem:chloro-N-{[5-({4-[(2,2-dioxido-1,3-dihydro-2-benzothien-5-yl)amino]piperidin-1-yl}-sulfonyl)} thien-2-yl] methyl) benzamide$
- 4-chloro-N-[(5-{[4-(2,3-dihydro-1H-inden-5-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 4-chloro-N-[(5-{[4-(4-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $\label{lem:chloro-N-[(5-{[4-({3-nitropyridin-2-yl}amino)piperidin-1-yl]sulfonyl})} thien-2-yl) methyl] benzamide$
- N-{[5-({4-[(3-aminopyridin-2-yl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-4-chlorobenzamide
  - N-[(5-{[4-([1,1'-biphenyl]-3-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide

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N-[(5-{[4-(3-benzylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide

4-chloro-N-[(5-{[4-(pyrimidin-2-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

5 4-chloro-N-{[5-({4-[4-(morpholin-4-ylsulfonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-({5-[(4-{[4-(trifluoromethyl)pyrimidin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-chloro-N-[(5-{[4-(3-cyclohexyl-4-hydroxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-(\{5-[(4-\{3-[(butylamino)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-4-chlorobenzamide$ 

4-chloro-N-[(5-{[4-(3-ethylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[4-(5,6,7,8-tetrahydronaphthalen-1-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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 $N-\{[5-(\{4-[3-(aminosulfonyl)anilino] piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-4-chlorobenzamide$ 

4-chloro-N-[(5-{[4-(quinolin-5-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[4-(quinolin-8-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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4-Chloro-N-[(5-{[4-(3-propylphenoxy)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:condition} $$4-chloro-N-\{[5-(\{4-[(2E)-3-phenylprop-2-enoyl]piperazin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$ 

5 4-chloro-N-({5-[(4-{4-nitrobenzoyl}piperazin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-(\{5-[(4-benzoylpiperazin-1-yl)sulfonyl]thien-2-yl\}methyl)-4-chlorobenzamide$ 

 $\label{lem:chloro-N-{[5-(4-[4-(trifluoromethyl)benzoyl]piperazin-1-yl}sulfonyl) thien-2-yl] methyl} benzamide$ 

4-chloro-N-{[5-({4-[4-(dimethylamino)benzoyl]piperazin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $\label{lem:condition} $$4-chloro-N-[(5-\{[4-(2-fluorobenzoyl)piperazin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide$ 

4-chloro-N-[(5-{[4-(2,6-difluorobenzoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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4-chloro-N-[(5-{[4-(3-fluorobenzoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[4-(2-naphthoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[4-(1-naphthoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-({5-[(4-{2-nitrobenzoyl}piperazin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-chloro-N-[(5-{[4-(pyridin-3-ylcarbonyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

- N-[(5-{[4-(2,1,3-benzoxadiazol-5-ylcarbonyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide
- $\label{lem:condition} $$4-chloro-N-[(5-\{[4-(2,4-difluorobenzoyl)piperazin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$
- 5 4-chloro-N-[(5-{[4-(2,4,6-trifluorobenzoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 4-chloro-N-[(5-{[4-(2,6-dichlorobenzoyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 4-chloro-N-({5-[(4-heptanoylpiperazin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
- 4-chloro-N-[(5-{[4-(quinolin-8-ylsulfonyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- N-[(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3nitrobenzamide

  - $N-[(5-\{[4-(2,4-difluor obenzoyl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-nitrobenzamide$
- N-[(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide
  - $N-[(5-\{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-nitrobenzamide$

4-nitro-N-({5-[(4-{3-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-[(5-\{[4-(2,4-difluor obenzoyl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-nitrobenzamide$ 

N-[(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide

 $3-nitro-N-[(5-\{[4-(3-methoxyanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

3-nitro-N-{[5-({4-[3-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

N-{[5-([4-[3-(dimethylamino)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-nitrobenzamide

 $\label{lem:condition} 3-nitro-N-\{[5-(\{4-[3-(methylsulfonyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\} benzamide$ 

3-nitro-N-{[5-({4-[3-(methylsulfanyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-\{[5-(\{4-[3-(aminosulfonyl)anilino] piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-nitrobenzamide$ 

methyl 3-{[1-({5-[({3-nitrobenzoyl}amino)methyl]-thien-2-yl}sulfonyl)-piperidin-4-yl]amino}benzoate

 $N-\{[5-(\{4-[3-(aminocarbonyl)anilino]piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-nitrobenzamide$ 

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 $3-nitro-N-(\{5-[(4-\{3-nitroanilino\}piperidin-1-yl)sulfonyl]thien-2-yl\} methyl) benzamide \\$ 

 $3-nitro-N-[(5-\{[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide$ 

5 3-nitro-N-{[5-({4-[2-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $3-nitro-N-(\{5-[(4-\{2-nitroanilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl) benzamide$ 

N-[(5-{[4-(4-chloroanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-

10 nitrobenzamide

 $3-nitro-N-\{[5-(\{4-[4-(trifluoromethyl)anilino]piperidin-1-yl\}sulfonyl) thien-2-yl] methyl\} benzamide \\$ 

 $3-nitro-N-(\{5-[(4-\{4-[(trifluoromethyl)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl) benzamide$ 

N-{[5-({4-[4-(aminocarbonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-nitrobenzamide

 $N-[(5-\{[4-(3-propylanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-nitrobenzamide$ 

N-[(5-{[4-(3-chloroanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-420 nitrobenzamide

 $\label{lem:condition} 4-nitro-N-[(5-\{[4-(3-methoxyanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide$ 

 $N-\{[5-(\{4-[3-(dimethylamino)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-4-nitrobenzamide$ 

5 4-nitro-N-[(5-{[4-(3-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:condition} 4-nitro-N-\{[5-(\{4-[3-(methylsulfonyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\} benzamide$ 

4-nitro-N-{[5-({4-[3-(methylsulfanyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-\{[5-([4-[3-(aminosulfonyl)anilino]piperidin-1-yl]sulfonyl)thien-2-yl]methyl\}-4-nitrobenzamide$ 

 $3-\{[1-(\{5-[(\{4-nitrobenzoyl\}amino)methyl]thien-2-yl\}sulfonyl)piperidin-4-yl]amino\}benzamide$ 

3-{[1-({5-[({4-nitrobenzoyl}amino)methyl]thien-2-yl}sulfonyl)piperidin-4-yl]amino}benzamide

4-nitro-N-({5-[(4-{3-nitroanilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-nitro-N-[(5-{[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:condition} $$4-nitro-N-\{[5-(\{4-[2-(trifluoromethyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}$ benzamide$ 

4-nitro-N-({5-[(4-{2-nitroanilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-[(5-\{[4-(4-chloroanilino)piperidin-1-yl]sulfonyl] thien-2-yl) methyl]-4-nitrobenzamide$ 

5 4-nitro-N-{[5-({4-[4-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

N-{[5-({4-[4-(aminocarbonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-4nitrobenzamide

 $N-\{[5-(\{4-[4-(1,3-dithiolan-2-yl)anilino]piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-4-nitrobenzamide$ 

 $N-(\{5-[(4-\{3-[amino(imino)methyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-nitrobenzamide$ 

N-({5-[(4-{3-[(2-hydroxyethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-nitrobenzamide

 $N-(\{5\hbox{-}[(4\hbox{-}anilinopiperidin-1-yl)sulfonyl]thien-2-yl\} methyl)-3-nitrobenzamide$ 

 $N-(\{5-[(4-\{3-[(2-hydroxyethyl)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-4-nitrobenzamide$ 

N-({5-[(4-anilinopiperidin-1-yl)sulfonyl]thien-2-yl}methyl)-4-nitrobenzamide
N-({5-[(4-{3-[amino(imino)methyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-4-nitrobenzamide

3-nitro-N-({5-[(4-{3-[(trifluoromethyl)sulfanyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

5 3-nitro-N-[(5-{[4-({3-nitropyridin-2-yl}amino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

N-{[5-({4-[(2,2-dioxido-1,3-dihydro-2-benzothien-5-yl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-nitrobenzamide

N-[(5-{[4-(2,3-dihydro-1H-inden-5-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

 $3-nitro-N-[(5-\{[4-(2-propylanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

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3-nitro-N-[(5-{[4-(4-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

N-[(5-{[4-(3-tert-butylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

 $3-nitro-N-\{[5-(\{4-[3-(1,3-oxazol-5-yl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl]benzamide$ 

 $3-nitro-N-[(5-\{[4-(2-phenylethyl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

N-({5-[(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-nitrobenzamide

 $N-[(5-\{[4-([1,1'-biphenyl]-3-ylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-nitrobenzamide$ 

 $N-[(5-\{[4-(3-benzylanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-nitrobenzamide$ 

 $3-nitro-N-\{[5-(\{4-[3-(morpholin-4-ylsulfonyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$ 

5 3-nitro-N-[(5-{[4-(3-propylphenoxy)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\label{lem:local_substitution} $$4-nitro-N-[(5-\{[4-(pyrimidin-2-ylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]$$benzamide$ 

N-{[5-({4-[(3-aminopyridin-2-yl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-4nitrobenzamide

 $\label{lem:condition} $$4-nitro-N-[(5-\{[4-([3-nitropyridin-2-yl]amino)piperidin-1-yl]sulfonyl]$ thien-2-yl) methyl] benzamide$ 

 $N-[(5-\{[4-(2,3-dihydro-1H-inden-5-ylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-4-nitrobenzamide$ 

4-nitro-N-[(5-{[4-(2-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

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4-nitro-N-[(5-{[4-(4-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

N-[(5-{[4-(3-tert-butylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide

 $\label{lem:condition} $$4-nitro-N-\{[5-(\{4-[3-(1,3-oxazol-5-yl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl}$$benzamide$ 

 $4-nitro-N-[(5-\{[4-(2-phenylethyl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide \\$ 

N-({5-[(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-4-nitrobenzamide

N-[(5-{[4-([1,1'-biphenyl]-3-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide

5 N-[(5-{[4-(3-benzylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide

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4-nitro-N-{[5-({4-[3-(morpholin-4-ylsulfonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

N-[(5-{[4-(2-aminoanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

3-nitro-N-[(5-{[4-(pyrimidin-2-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-\{[5-(\{4-[(3-aminopyridin-2-yl)amino]piperidin-1-yl\}sulfonyl) thien-2-yl]methyl\}-3-nitrobenzamide$ 

N-({5-[(4-{2-nitro-4-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-methoxybenzamide

3-nitro-N-[(5-{[4-(3-phenylpropyl)piperazin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

3-nitro-N-({5-[(4-{[4-(trifluoromethyl)pyrimidin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

N-[(5-{[4-(3-cyclohexyl-4-hydroxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

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N-({5-[(4-{3-[(butylamino)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-nitrobenzamide

N-[(5-{[4-(3-ethylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

 $3-nitro-N-[(5-\{[4-(5,6,7,8-tetrahydronaphthalen-1-ylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

4-nitro-N-[(5-{[4-(3-propylphenoxy)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

N-[(5-{[4-(2,4-difluorobenzoyl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide

 $N-[(5-\{[4-(2,4-difluor obenzoyl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

 $2- Hydroxy-N-(\{5-[(4-\{3-[(trifluoromethyl)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)benzamide \\$ 

 $N-[(5-\{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

 $N-[(5-\{[4-(1H-1,2,3-benzotriazol-1-yl]piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-2-hydroxybenzamide$ 

 $N-\{[5-(\{4-[4-(1,3-dithiolan-2-yl)anilino] piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-nitrobenzamide$ 

3-methoxy-N-[(5-{[4-(3-methoxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

3-methoxy-N-{[5-({4-[3-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

- $N-\{[5-(\{4-[3-(dimethylamino)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$
- 3-methoxy-N-[(5-{[4-(3-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- 3-methoxy-N-{[5-({4-[3-(methylsulfonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
  - $3-methoxy-N-\{[5-(\{4-[3-(methylsulfanyl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$
- N-{[5-({4-[3-(aminosulfonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-methoxybenzamide
  - methyl 3-({1-[(5-{[(3-methoxybenzoyl)amino]-methyl}thien-2-yl)sulfonyl]-piperidin-4-yl}amino)-benzoate
  - $N-\{[5-(\{4-[3-(aminocarbonyl)anilino]piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-methoxybenzamide$
- 3-methoxy-N-[(5-{[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $N-(\{5-[(4-\{3-nitroanilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$
- 3-methoxy-N-{[5-({4-[2-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
  - $N-(\{5-[(4-\{2-nitroanilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$

- $N-\{[5-(\{4-[4-(aminocarbonyl)anilino]piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-methoxybenzamide$
- $N-\{[5-(\{4-[4-(1,3-dithiolan-2-yl)anilino] piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-methoxybenzamide$
- N-[(5-{[4-(3-chloroanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide
  - N-[(5-{[4-(4-chloroanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide
- 3-methoxy-N-({5-[(4-{4-[(trifluoromethyl)sulfonyl]anilino}piperidin-1yl)sulfonyl]thien-2-yl}methyl)benzamide
  - $N-(\{5-[(4-\{3-[amino(imino)methyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide\\$
  - $N-(\{5-[(4-\{3-[(2-hydroxyethyl)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$
- 3-methoxy-N-({5-[(4-{3-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
  - $N\hbox{-}(\{5\hbox{-}[(4\hbox{-}anilinopiperidin-1-yl)sulfonyl]}thien\hbox{-}2-yl\} methyl)\hbox{-}3\hbox{-}methoxybenzamide$
  - $3-methoxy-N-(\{5-[(4-\{3-[(trifluoromethyl)sulfanyl]anilino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)benzamide$
- 20 N-[(5-{[4-(4-hydroxyanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide
  - 3-nitro-N-({5-[(4-{3-[(trifluoromethyl)sulfanyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-[(5-\{[4-(2-hydroxyanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

3-methoxy-N-[(5-{[4-(pyrimidin-2-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-\{[5-(\{4-[(3-aminopyridin-2-yl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

N-[(5-{[4-({3-nitropyridin-2-yl}amino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3methoxybenzamide

 $N-\{[5-(\{4-[(2,2-dioxido-1,3-dihydro-2-benzothien-5-yl)amino]piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-methoxybenzamide$ 

 $N-[(5-\{[4-(2,3-dihydro-1H-inden-5-ylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

3-methoxy-N-[(5-{[4-(2-propylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $3-methoxy-N-[(5-\{[4-(4-propylanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide\\$ 

N-[(5-{[4-(3-tert-butylanilino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3methoxybenzamide

N-({5-[(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-methoxybenzamide

 $3-methoxy-N-\{[5-(\{4-[3-(1,3-oxazol-5-yl)anilino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$ 

 $N-[(5-\{[4-([1,1'-biphenyl]-3-ylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

- 3-methoxy-N-[(5-{[4-(3-propylphenoxy)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - 3-methoxy-N-{[5-({4-[3-(morpholin-4-ylsulfonyl)anilino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
- 3-methoxy-N-[(5-{[4-(2-phenylethyl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  - $N-[(5-\{[4-(3-benzylanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$
  - $3-methoxy-N-[(5-\{[4-(3-phenylpropyl)piperazin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide$
- 3-methoxy-N-({5-[(4-{[4-(trifluoromethyl)pyrimidin-2-yl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide
  - $N-[(5-\{[4-(3-cyclohexyl-4-hydroxyanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$
- N-({5-[(4-{3-[(butylamino)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-methoxybenzamide
  - $N-[(5-\{[4-(3-ethylanilino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$

3-methoxy-N-[(5-{[4-(5,6,7,8-tetrahydronaphthalen-1-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-[(5-\{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-5-nitro-1H-pyrazole-3-carboxamide$ 

N-[(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-2-oxo-1,2-dihydropyridine-3-carboxamide

 $N-[(5-\{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-2-thioxo-1,2-dihydropyridine-3-carboxamide$ 

N-[(5-{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3,4-dihydroxybenzamide

 $N-[(5-\{[4-(1H-1,2,3-benzotriazol-1-yl)piperidin-1-yl]sulfonyl\} thien-2-yl) methyl] pyridine-2-carboxamide$ 

 $N-[(5-\{[4-(hexyloxy)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamidentallaring and the substitution of the subs$ 

 $N-(\{5-[(4-\text{heptanoylpiperidin-1-yl}) sulfonyl] thien-2-yl\} methyl)-3-methoxybenzamide$ 

4-chloro-N-[(5-{[4-(3-propylanilino)piperidin-1-yl]sulfonyl}-2-furyl)methyl]benzamide

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4-chloro-N-[(5-{[4-(3-chloroanilino)piperidin-1-yl]sulfonyl}-2-furyl)methyl]benzamide

4-chloro-N-[(5-{[4-(3-methoxyanilino)piperidin-1-yl]sulfonyl}-2-furyl)methyl]benzamide

 $\label{lem:chloro-N-{[5-({4-[3-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)-2-furyl]} which is a substitution of the su$ 

- $\label{lem:chloro-N-{S-(4-[3-(dimethylamino)anilino]piperidin-1-yl} sulfonyl)-2-furyl] methyl} benzamide$
- 5 4-chloro-N-{[5-({4-[3-(methylsulfanyl)anilino]piperidin-1-yl}sulfonyl)-2-furyl]methyl}benzamide
  - $N-\{[5-(\{4-[3-(aminosulfonyl)anilino]piperidin-1-yl\} sulfonyl)-2-furyl] methyl\}-4-chlorobenzamide$
- methyl 3-({1-[(5-{[(4-chlorobenzoyl)amino]methyl}-2-furyl)sulfonyl]piperidin-4-10 yl}amino)benzoate
  - $3-(\{1-[(5-\{[(4-chlorobenzoyl)amino]methyl\}-2-furyl)sulfonyl]piperidin-4-yl\}amino)benzamide$
  - $\hbox{$4$-chloro-N-(\{5-[(4-\{3-nitroanilino\}piperidin-1-yl)sulfonyl]-2-furyl\}$ methyl)} benzamide$
  - $\label{lem:condition} \mbox{4-chloro-N-[(5-\{[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl\}-2-piperidin-1-yl]} \mbox{3-chloro-N-[(5-\{[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]-2-piperidin-1-yl]} \mbox{3-chloro-N-[(5-[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]} \mbox{3-chloro-N-[(5-[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]} \mbox{3-chloro-N-[(5-[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]} \mbox{3-chloro-N-[(5-[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]} \mbox{3-chloro-N-[(5-[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]} \mbox{3-chloro-N-[(5-[4-(2-methoxyanilino)piperidin-1-yl]sulfonyl]} \mbox{3-chloro-N-[(5-[4-(2-[4-[4-(2-[4-[4-(2-[4-[4-(2-[4-[4-[4-[4-[4-[4$
- 15 furyl)methyl]benzamide
  - 4-chloro-N-{[5-({4-[2-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)-2-furyl]methyl}benzamide
  - 4-chloro-N-({5-[(4-{2-nitroanilino}piperidin-1-yl)sulfonyl]-2-furyl}methyl)benzamide
  - 4-chloro-N-[(5-{[4-(4-chloroanilino)piperidin-1-yl]sulfonyl}-2-
- 20 furyl)methyl]benzamide
  - $\label{lem:chloro-N-{[5-({4-[4-(trifluoromethyl)anilino]piperidin-1-yl}sulfonyl)-2-furyl]} methyl} benzamide$

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4-chloro-N-({5-[(4-{4-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]-2-furyl}methyl)benzamide

 $N-\{[5-(\{4-[4-(aminocarbonyl)anilino]piperidin-1-yl\}sulfonyl)-2-furyl]methyl\}-4-chlorobenzamide$ 

5 4-chloro-N-{[5-({4-[4-(1,3-dithiolan-2-yl)anilino]piperidin-1-yl}sulfonyl)-2-furyl]methyl}benzamide

N-({5-[(4-{3-[amino(imino)methyl]anilino}piperidin-1-yl)sulfonyl]-2-furyl}methyl)-4-chlorobenzamide

4-chloro-N-({5-[(4-{3-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]-2-furyl}methyl)benzamide

 $N\hbox{-}(\{5\hbox{-}[(4\hbox{-}anilinopiperidin-}1\hbox{-}yl)sulfonyl]\hbox{-}2\hbox{-}furyl\} methyl)\hbox{-}4\hbox{-}chlorobenzamide}$ 

 $\label{lem:condition} $$4-nitro-N-({5-[(4-{3-[(trifluoromethyl)sulfanyl]anilino}piperidin-1-yl)sulfonyl]2-furyl}methyl) benzamide$ 

4-chloro-N-({5-[(3-{3-[(trifluoromethyl)sulfonyl]anilino}pyrrolidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $\label{lem:condition} $$4-chloro-N-(\{5-[(4-\{3-[(trifluoromethyl)sulfonyl]anilino\}azepan-1-yl)sulfonyl]thien-2-yl\}methyl) benzamide$ 

5-{[(3-methoxybenzoyl)amino]methyl}-2-[(4-{3-[(trifluoromethyl)sulfonyl]-20 anilino}piperidin-1-yl)sulfonyl]thiophene-3-carboxylic acid

5-{[(3-methoxybenzoyl)amino]methyl}-2-{[4-(octylamino)piperidin-1-yl]sulfonyl}thiophene-3-carboxylic acid

 $N-(2-hydroxyethyl)-5-\{[(3-methoxybenzoyl)amino]methyl\}-2-[(4-\{3-[(trifluoromethyl)sulfonyl]anilino\}piperidin-1-yl)sulfonyl]thiophene-3-carboxamide$ 

N-({4-(hydrazinocarbonyl)-5-[(4-{3-[(trifluoromethyl)sulfonyl]anilino}-piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-methoxybenzamide

5 5-{[(3-methoxybenzoyl)amino]methyl}-2-[(4-{3-[(trifluoromethyl)sulfonyl]-anilino}piperidin-1-yl)sulfonyl]thiophene-3-carboxamide

N-[2-(dimethylamino)ethyl]-5-{[(3-methoxybenzoyl)amino]methyl}-2-[(4-{3-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thiophene-3-carboxamide

N-({4-(hydroxymethyl)-5-[(4-{3-[(trifluoromethyl)sulfonyl]anilino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)-3-methoxybenzamide

 $\label{lem:condition} $$4-chloro-N-[(5-\{[4-(hexylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide $$3-Methoxy-N-\{[5-(\{4-[(4-trifluoromethylbenzyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl}benzamide$ 

4-chloro-N-[(5-{[4-(1,3-thiazol-2-ylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $\textbf{4-chloro-N-[(5-\{[4-(heptylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)} methyl] benzamide \\$ 

 $\textbf{4-chloro-N-[(5-\{[4-(pentylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)} methyl] benzamide \\$ 

 $\hbox{$4$-chloro-N-[(5-\{[4-(butylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]$ benzamided and the sum of th$ 

4-chloro-N-[(5-{[4-(dodecylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-{[5-({4-[(2-cyclohexylethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[(cyclohexylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $\label{eq:N-[5-(4-[(1R,2R,4S)-bicyclo[2.2.1]hept-2-ylamino]piperidin-1-yl} sulfonyl) thien-2-yl] methyl} - 4-chlorobenzamide$ 

4-chloro-N-{[5-({4-[(2-propoxyethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

N-{[5-({4-[(1-adamantylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-4-chlorobenzamide

4-chloro-N-{[5-({4-[(2-pyridin-2-ylethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[(2-piperidin-1-ylethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-{[5-({4-[(2-ethylhexyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

4-chloro-N-({5-[(4-{[3-(1H-imidazol-1-yl)propyl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

4-chloro-N-[(5-{[4-(octylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-[(5-\{[4-(heptylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

 $3-methoxy-N-[(5-\{[4-(octylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

3-methoxy-N-[(5-{[4-(pentylamino)piperidin-1-yl]sulfonyl}thien-2-

yl)methyl]benzamide

 $N-[(5-\{[4-(butylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

 $N-[(5-\{[4-(dodecylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-widthyl-3-width$ 

methoxybenzamide

N-[[5-([4-[(2-cyclohexylethyl)amino]piperidin-1-yl]sulfonyl)thien-2-yl]methyl]-3-methoxybenzamide

 $N-(\{5-[(4-\{[(1R)-1-cyclohexylethyl]amino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$ 

 $\label{eq:N-[5-(4-[(1R,2R,4S)-bicyclo[2.2.1]hept-2-ylamino]piperidin-1-yl)} sulfonyl) thien-2-yl] methyl]-3-methoxybenzamide$ 

3-methoxy-N-{[5-({4-[(2-propoxyethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-\{[5-(\{4-[(1-adamantylmethyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

 $N-\{[5-(\{4-[(3,3-diethoxypropyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

 $3-methoxy-N-\{[5-(\{4-[(3-morpholin-4-ylpropyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$ 

 $3-methoxy-N-\{[5-(\{4-[(2-pyridin-2-ylethyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$ 

3-methoxy-N-{[5-({4-[(2-piperidin-1-ylethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

N-{[5-({4-[(2-ethylhexyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-methoxybenzamide

 $N-(\{5-[(4-\{[3-(1H-imidazol-1-yl)propyl]amino\}piperidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$ 

 $N-[(5-\{[4-(hexylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

 $N-[(5-\{[4-(heptylamino)azepan-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

 $3-methoxy-N-[(5-\{[4-(octylamino)azepan-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

 $3-methoxy-N-[(5-\{[4-(pentylamino)azepan-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide \\N-[(5-\{[4-(butylamino)azepan-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide \\N-[(5-\{[4-(butylamino)azepan-1-yl]sulfonyl]thien-2-yl)methyl]-3-methoxybenzamide \\N-[(5-\{[4-(butylamino)azepan-1-yl]sulfonyl]thien-2-yl)methyl]$ 

N-[(5-{[4-(dodecylamino)azepan-1-yl]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide

 $N-\{[5-(\{4-[(2-cyclohexylethyl)amino]azepan-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

 $N-(\{5-[(4-\{[(1R)-1-cyclohexylethyl]amino\}azepan-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$ 

 $N-\{[5-(\{4-[(1R,2R,4S)-bicyclo[2.2.1]hept-2-ylamino]azepan-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

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3-methoxy-N-{[5-({4-[(2-propoxyethyl)amino]azepan-1-yl}sulfonyl)thien-2-
yl]methyl}benzamide
N-\{[5-(\{4-[(cyclohexylmethyl)amino]azepan-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-interpolation and the sum of th
methoxybenzamide
N-{[5-({4-[(1-adamantylmethyl)amino]azepan-1-yl}sulfonyl)thicn-2-yl]methyl}-3-
methoxybenzamide
3-methoxy-N-\{[5-(\{4-[(3-morpholin-4-ylpropyl)amino]azepan-1-yl\}sulfonyl)thien-2-1-yl-2-1-yl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylpropyl-2-ylp
  yl]methyl}benzamide
  3-methoxy-N-{[5-({4-[(2-pyridin-2-ylethyl)amino]azepan-1-yl}sulfonyl)thien-2-
  yl]methyl}benzamide
  3-methoxy-N-{[5-({4-[(2-piperidin-1-ylethyl)amino]azepan-1-yl}sulfonyl)thien-2-
  yl]methyl]benzamide
  N-\{[5-(\{4-[(2-ethylhexyl)amino]azepan-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-instantian (a.e., a.e., a.e
   methoxybenzamide
  yl}methyl)-3-methoxybenzamide
   \hbox{$4$-chloro-N-[(5-\{[4-(heptylamino)azepan-1-yl]sulfonyl\}thien-2-yl)methyl]} benzamide \\
    4-chloro-N-[(5-{[4-(octylamino)azepan-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
     4-chloro-N-[(5-{[4-(pentylamino)azepan-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
    N-[(5-{[4-(butylamino)azepan-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide
     4-chloro-N-[(5-{[4-(dodecylamino)azepan-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
     4-chloro-N-{[5-({4-[(2-cyclohexylethyl)amino]azepan-1-yl}sulfonyl)thien-2-
     yl]methyl}benzamide
     N-\{[5-(\{4-[(1R,2R,4S)-bicyclo[2.2.1]hept-2-ylamino]azepan-1-yl\}sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-yl]sulfonyl)thien-2-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-ylamino[azepan-1-
     yl]methyl}-4-chlorobenzamide
     4-chloro-N-{[5-({4-[(2-propoxyethyl)amino]azepan-1-yl}sulfonyl)thien-2-
     yl]methyl}benzamide
       4-chloro-N-{[5-({4-[(2-ethylhexyl)amino]azepan-1-yl}sulfonyl)thien-2-
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yl]methyl}benzamide

4-chloro-N-[(5-{[4-(hexylamino)azepan-1-yl]sulfonyl}thien-2-yl)methyl]benzamide

 $N-[(5-\{[4-(hexylamino)azepan-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

yl]sulfonyl}thien-2-yl)methyl]benzamide

3-methoxy-N-({5-[(4-{[2-(4-methylphenyl)ethyl]amino}piperidin-1-yl)sulfonyl]thien-2-yl}methyl)benzamide

 $3\text{-methoxy-N-}(\{5\text{-}[(4\text{-}\{[(1S,2R)\text{-}2\text{-phenylcyclopropyl}]amino}\}\text{piperidin-}1\text{-}1\text{-}1\text{-}1\text{-}2\text{-phenylcyclopropyl}]$ 

yl)sulfonyl]thien-2-yl}methyl)benzamide

3-methoxy-N-{[5-({4-[(1-naphthylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-

yl]methyl}benzamide

3-methoxy-N-{[5-({4-[(2-phenylpropyl)amino]piperidin-1-yl}sulfonyl)thien-2-

yl]methyl}benzamide

yl}methyl)-3-methoxybenzamide

3-methoxy-N-{[5-({4-[(3-phenylpropyl)amino]piperidin-1-yl}sulfonyl)thien-2-

yl]methyl}benzamide

 $N-\{[5-(\{4-[(2,3-dihydroxypropyl)amino]piperidin-1-yl\} sulfonyl) thien-2-yl] methyl\}-3-methoxybenzamide$ 

N-{[5-({4-[(2-hydroxyethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-methoxybenzamide

 $3-methoxy-N-[(5-\{[4-(nonylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide$ 

 $3-methoxy-N-[(5-\{[4-(decylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide$ 

 $3-methoxy-N-[(5-\{[4-(ethylamino)piperidin-1-yl]sulfonyl\}thien-2-yl)methyl] benzamide \\$ 

 $N-\{[5-(\{4-[(2-[1,1'-biphenyl]-4-ylethyl)amino]piperidin-1-yl\} sulfonyl) thien-2-ylethyl amino[piperidin-1-yl] sulfonyl (barbara amino) thien-2-ylethyl (barbara amino) piperidin-1-yl (barbara amino) thien-2-ylethyl (barbara am$ 

yl]methyl}-3-methoxybenzamide

 $N-\{[5-(\{4-[([1,1'-biphenyl]-3-ylmethyl)amino]piperidin-1-yl\} sulfonyl) thien-2-ylmethyl amino piperidin-1-yl sulfonyl) thien-2-ylmethyl amino piperidin-1-yl sulfonyl sulfonyl thien-2-ylmethyl amino piperidin-1-yl sulfonyl thien-2-ylmethyl amino piperidin-1-yll sulfonyl thien-2-yll sulfonyl sulfonyl thien-2-yll sulfonyl sulfonyl sulfonyl sulfonyl sulfonyl sulfonyl sulfonyl s$ 

yl]methyl}-3-methoxybenzamide

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3-methoxy-N-{[5-({4-[(2-thien-2-ylethyl)amino]piperidin-1-yl}sulfonyl)thien-2-
yl]methyl}benzamide
3-methoxy-N-[(5-{[4-({4-[(trifluoromethyl)sulfonyl]benzyl}amino)piperidin-1-
yl]sulfonyl]thien-2-yl)methyl]benzamide
3-methoxy-N-{[5-({4-[(quinolin-4-ylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-
yl]methyl}benzamide
N-\{[5-(\{4-[([1,1'-biphenyl]-4-ylmethyl)amino]-1-piperidinyl\}sulfonyl)-2-iphenyl]\}
 thienyl]methyl}-3-methoxybenzamide
 4-chloro-N-{[5-({4-[(2-{[(trifluoromethyl)sulfonyl]amino}ethyl)amino]-1-
 piperidinyl}sulfonyl)-2-thienyl]methyl}benzamide
  \hbox{$4$-chloro-N-[(5-\{[4-(propylamino)-1-piperidinyl]sulfonyl]-2-thienyl)$ methyl] benzamided and the sum of 
 4-chloro-N-[(5-{[4-({4-[(trifluoromethyl)sulfonyl]benzyl}amino)-1-
 piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide
 4-chloro-N-{[5-({4-[(3,4-dihydroxybenzyl)amino]-1-piperidinyl}sulfonyl)-2-
 thienyl]methyl]benzamide
  methyl [{1-[(5-{[(4-chlorobenzoyl)amino]methyl}-2-thienyl)sulfonyl]-4-
  piperidinyl (hexyl) amino ] acetate
  tert-butyl [{1-[(5-{[(4-chlorobenzoyl)amino]methyl}-2-thienyl)sulfonyl]-4-
  piperidinyl (hexyl) amino ] acetate
  [{1-[(5-{[(4-chlorobenzoyl)amino]methyl}-2-thienyl)sulfonyl]-4-
  piperidinyl}(hexyl)amino]acetic acid
  N-[(5-{[3-(heptylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-
  methoxybenzamide
  3-methoxy-N-[(5-{[3-(octylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
  3-methoxy-N-[(5-{[3-(pentylamino)pyrrolidin-1-yl]sulfonyl}thien-2-
   yl)methyl]benzamide
  N-[(5-{[3-(butylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide
   N-[(5-{[3-(dodecylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-
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methoxybenzamide

 $N-\{[5-(\{3-[(2-cyclohexylethyl)amino]pyrrolidin-1-yl\}sulfonyl)thicn-2-yl]methyl\}-3-methoxybenzamide$ 

 $N-(\{5-[(3-\{[(1R)-1-cyclohexylethyl]amino\}pyrrolidin-1-yl)sulfonyl]thien-2-yl\}methyl)-3-methoxybenzamide$ 

 $N-\{[5-(\{3-[(1R,2R,4S)-bicyclo[2.2.1]hept-2-ylamino]pyrrolidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

3-methoxy-N-{[5-({3-[(2-propoxyethyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-\{[5-(\{3-[(cyclohexylmethyl)amino]pyrrolidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

N-{[5-({3-[(1-adamantylmethyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-methoxybenzamide

 $3-methoxy-N-\{[5-(\{3-[(3-morpholin-4-ylpropyl)amino]pyrrolidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide \\$ 

 $3-methoxy-N-\{[5-(\{3-[(2-pyridin-2-ylethyl)amino]pyrrolidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$ 

3-methoxy-N-{[5-({3-[(2-piperidin-1-ylethyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-\{[5-(\{3-[(2-ethylhexyl)amino]pyrrolidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

 $N-[(5-\{[3-(hexylamino)pyrrolidin-1-yl]sulfonyl\}thien-2-yl)methyl]-3-methoxybenzamide$ 

4-chloro-N-[(5-{[3-(heptylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide 4-chloro-N-[(5-{[3-(hexylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide 4-chloro-N-[(5-{[3-(pentylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide N-[(5-{[3-(butylamino)pyrrolidin-1-yl]sulfonyl}thien-2-yl)methyl]-4-chlorobenzamide 4-chloro-N-{[5-({3-[(2-cyclohexylethyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

N-{[5-({3-[(1R,2R,4S)-bicyclo[2.2.1]hept-2-ylamino]pyrrolidin-1-yl}sulfonyl)thicn-2-yl]methyl}-4-chlorobenzamide

 $\hbox{$4$-chloro-N-(\{5-[(3-\{[(1-hydroxycyclohexyl)methyl]amino}\} pyrrolidin-1-defined a superior of the property of the propert$ 

yl)sulfonyl]thien-2-yl}methyl)benzamide

 $N-\{[5-(\{3-[(1-adamantylmethyl)amino]pyrrolidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-4-chlorobenzamide$ 

4-chloro-N-{[5-({3-[(3-morpholin-4-ylpropyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl]benzamide

 $\label{lem:condition} $$4$-chloro-N-{[5-({3-[(2-piperidin-1-ylethyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide$ 

4-chloro-N-{[5-({3-[(2-ethylhexyl)amino]pyrrolidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $\label{lem:condition} $$4-chloro-N-[(5-\{[3-(octylamino)pyrrolidin-1-yl]sulfonyl\}thien-2-yl)methyl]benzamide methyl (2S)-1-[(5-\{[(4-chlorobenzoyl)amino]methyl\}-2-thienyl)sulfonyl]-4-(hexylamino)-2-pyrrolidinecarboxylate$ 

 $N-\{[5-(\{4-[2-(butylamino)ethyl]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$ 

 $N-\{[5-(\{4-[(4-butylanilino)methyl]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}-3-methoxybenzamide$ 

4-chloro-N-{[5-({4-[(cyclohexylmethyl)(hexyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide

 $N-\{[5-(\{4-[benzyl(hexyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-4-chlorobenzamide$ 

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4-chloro-N-{[5-({4-[hexyl(pyridin-3-ylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-
yl]methyl]benzamide
4-chloro-N-{[5-({4-[hexyl(pyridin-4-ylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-
 yl]methyl}benzamide
4-chloro-N-{[5-({4-[hexyl(pyridin-2-ylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-
  yl]methyl]benzamide
  N-{[5-({4-[butyl(hexyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-4-
  chlorobenzamide
   \hbox{$4$-chloro-N-{[5-(\{4-[hexyl(3-phenylpropyl)amino]piperidin-1-yl\}sulfonyl)$ thien-2-width. } \\
  yl]methyl}benzamide
  4-chloro-N-{[5-({4-[hexyl(2-phenylethyl)amino]piperidin-1-yl]sulfonyl)thien-2-
   yl]methyl}benzamide
  N-\{[5-(\{4-[[(5-bromo-2-furyl)methyl](hexyl)amino]piperidin-1-yl\} sulfonyl) thien-2-level amino piperidin-1-yl\} sulfonyl) thien-2-level amino piperidin-1-yl] sulfonyl) sulfonyl) thien-2-level amino piperidin-1-yl] sulfonyl) sulfo
   yl]methyl}-4-chlorobenzamide
    3-methoxy-N-({5-[(4-{methyl[4-(trifluoromethyl)benzyl]amino}-1-
    piperidinyl)sulfonyl]-2-thienyl]methyl)benzamide
    4-chloro-N-{[5-({4-[(3-chlorobenzyl)amino]piperidin-1-yl}sulfonyl)thien-2-
    yl]methyl]benzamide
    2-yl}methyl)benzamide
    yl]methyl}benzamide
      3-methoxy-N-{[5-([4-[(4-propylbenzyl)amino]piperidin-1-yl}sulfonyl)thien-2-
      yl]methyl}benzamide
      2-yl}methyl)benzamide
      3-methoxy-N-(\{5-[(4-\{[4-(trifluoromethoxy)benzyl]amino\}piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyl]thien-piperidin-1-yl)sulfonyllangun (base-piperidin-1-yl)sulfonyllangun (ba
      2-v1\methyl)benzamide
      N-(\{5-[(4-\{[4-(difluoromethoxy)benzyl]amino\}piperidin-1-yl)sulfonyl]thien-2-leading and the sum of the sum o
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- yl}methyl)-3-methoxybenzamide
- 3-methoxy-N-{[5-({4-[(2,3,4,5,6-pentamethylbenzyl)amino]piperidin-1-
- yl}sulfonyl)thien-2-yl]methyl}benzamide
- $3-methoxy-N-\{[5-(\{4-[(4-propoxybenzyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$
- N-{[5-({4-[(4-butoxybenzyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-methoxybenzamide
- 3-methoxy-N-{[5-({4-[(4-methoxybenzyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl}methyl}benzamide
- 3-methoxy-N-{[5-({4-[(pyridin-4-ylmethyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}benzamide
- $\label{lem:condition} 3-methoxy-N-\{[5-(\{4-[(pyridin-2-ylmethyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$
- $3-methoxy-N-\{[5-(\{4-[(pyridin-3-ylmethyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$
- $N-\{[5-(\{4-[(4-tert-butylbenzyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}-3-methoxybenzamide$
- N-{[5-({4-[(3-ethoxybenzyl)amino]piperidin-1-yl}sulfonyl)thien-2-yl]methyl}-3-methoxybenzamide
- $3-methoxy-N-\{[5-(\{4-[(4-phenoxybenzyl)amino]piperidin-1-yl\}sulfonyl)thien-2-yl]methyl\}benzamide$
- 3-methoxy-N-[(5-{[4-({4-[(trifluoromethyl)sulfanyl]benzyl}amino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]benzamide
- $\label{lem:condition} 3-methoxy-N-(\{5-[(4-\{[4-(methylsulfonyl]benzyl]amino\}-1-piperidinyl)sulfonyl]-2-thienyl\} methyl) benzamide$
- $N-(\{5-[(4-\{[3,5-bis(trifluoromethyl)benzyl]amino\}-1-piperidinyl)sulfonyl]-2-thienyl\} methyl)-3-methoxybenzamide$
- $N-(\{5-[(4-\{[2,5-bis(trifluoromethyl)benzyl]amino\}-1-piperidinyl)sulfonyl]-2-thienyl\}methyl)-3-methoxybenzamide$

N-({5-[(4-{[4-(ethylsulfanyl)benzyl]amino}-1-piperidinyl)sulfonyl]-2-thienyl}methyl)-3-methoxybenzamide

3-methoxy-N-[(5-{[4-({3-[(trifluoromethyl)sulfanyl]benzyl}amino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide

N-({5-[(4-{[(2,2-difluoro-1,3-benzodioxol-5-yl)methyl]amino}-1-piperidinyl)sulfonyl]-2-thienyl}methyl)-3-methoxybenzamide

 $N-\{[5-(\{4-[(4-iodobenzyl)amino]-1-piperidinyl\} sulfonyl)-2-thienyl] methyl\}-3-methoxybenzamide$ 

N-({5-[(4-{[4-(benzyloxy)benzyl]amino}-1-piperidinyl)sulfonyl]-2-thienyl}methyl)-3-methoxybenzamide

N-{[5-({4-[(mesitylmethyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}-3-methoxybenzamide

 $N-\{[5-(\{4-[(4-chlorobenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}-3-methoxybenzamide$ 

 $N-\{[5-(\{4-[(4-ethylbenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}-3-methoxybenzamide$ 

 $\label{lem:continuous} 3-methoxy-N-\{[5-(\{4-[(4-pentylbenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}benzamide$ 

 $3-methoxy-N-[(5-\{[4-(\{1-[4-(trifluoromethyl)phenyl]ethyl\}amino)-1-piperidinyl]sulfonyl\}-2-thienyl)methyl]benzamide$ 

 $3-methoxy-N-\{[5-(\{4-[(4-methylbenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}benzamide$ 

 $N-\{[5-(\{4-[(4-butylbenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}-3-methoxybenzamide$ 

 $N-\{[5-(\{4-[(4-isopropylbenzyl)amino]-1-piperidinyl\} sulfonyl)-2-thienyl] methyl\}-3-methoxybenzamide$ 

 $N-\{[5-(\{4-[(4-isobutylbenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}-3-methoxybenzamide$ 

N-({5-[(4-{[(1-hydroxy-1lambda~5~-pyridin-4-yl)methyl]amino}-1-piperidinyl)sulfonyl]-2-thienyl}methyl)-3-methoxybenzamide

piperidinyl)sulfonyl]-2-thienyl}methyl)-3-methoxybenzamide

N-{[5-({4-[(2,3-dihydro-1,4-benzodioxin-6-ylmethyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}-3-methoxybenzamide

N-{[5-({4-[(2,3-dihydro-1-benzofuran-5-ylmethyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}-3-methoxybenzamide

4-chloro-N-{[5-({4-[(4-propylbenzyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}benzamide

4-chloro-N-({5-[(4-{[4-(trifluoromethoxy)benzyl]amino}-1-piperidinyl)sulfonyl]-2-thienyl}methyl)benzamide

4-chloro-N-{[5-({4-[(4-propoxybenzyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}benzamide

 $N-\{[5-(\{4-[(4-butoxybenzyl)amino]-1-piperidinyl\}sulfonyl)-2-thienyl]methyl\}-4-chlorobenzamide$ 

4-chloro-N-{[5-({4-[(4-quinolinylmethyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}benzamide

N-{[5-({4-[(4-tert-butylbenzyl)amino]-1-piperidinyl}sulfonyl)-2-thienyl]methyl}-4-chlorobenzamide

4-chloro-N-[(5-{[4-({4-[(trifluoromethyl)sulfanyl]benzyl}amino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide

4-chloro-N-({5-[(4-{[4-(trifluoromethyl)benzyl]amino}-1-piperidinyl)sulfonyl]-2-thienyl}methyl)benzamide

 $3-methoxy-N-(\{5-[(4-\{[2-(trifluoromethyl)benzyl]amino\}-1-piperidinyl)sulfonyl]-2-thienyl\} methyl) benzamide$ 

3-methoxy-N-[(5-{[4-({[6-(trifluoromethyl)-3-pyridinyl]methyl}amino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide

N-[(5-{[4-(benzylamino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]-3methoxybenzamide 3-methoxy-N-[(5-{[4-({1-[4-(trifluoromethyl)phenyl]propyl}amino)-1piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide  $3-methoxy-N-[(5-\{[4-(\{1-methyl-1-[4-(trifluoromethyl)phenyl]ethyl\}amino)-1-[4-(trifluoromethyl)phenyl]ethyl]$ piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide 4-chloro-N-[(5-{[4-({1-[4-(trifluoromethyl)phenyl]ethyl}amino)-1piperidinyl]sulfonyl]-2-thienyl)methyl]benzamide 4-chloro-N-[(5-{[4-({1-methyl-1-[4-(trifluoromethyl)phenyl]ethyl}amino)-1piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide 4-chloro-N-[(5-{[2-({[4-(trifluoromethyl)benzyl]amino}methyl)-1pyrrolidinyl]sulfonyl}-2-thienyl)methyl]benzamide 4-chloro-N-[(5-{[(3R)-3-({[4-(trifluoromethyl)benzyl]amino}methyl)pyrrolidinyl]sulfonyl}-2thienyl)methyl]benzamide 4-chloro-N-({5-[(3-{[4-(trifluoromethyl)benzyl]amino}-1-piperidinyl)sulfonyl]-2thienyl]methyl)benzamide 4-chloro-N-{[5-({3-[(hexylamino)methyl]-1-piperidinyl}sulfonyl)-2thienyl]methyl}benzamide 4-chloro-N-({5-[(3-{[4-(trifluoromethyl)benzyl]amino}-1-pyrrolidinyl)sulfonyl]-2thienyl}methyl)benzamide 4-chloro-N-{[5-({(3R)-3-[(hexylamino)methyl]pyrrolidinyl}sulfonyl)-2thienyl]methyl]benzamide 2-thienyl)methyl]benzamide  $2-oxo-N-(\{5-[(4-\{[4-(trifluoromethyl)benzyl]amino\}-1-piperidinyl)sulfonyl]-2-piperidinyl)sulfonyl]-2-piperidinylysulfonyllys$ thienyl \methyl)-1,2-dihydro-3-pyridinecarboxamide N-[(5-{[4-(hexylamino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]-2-oxo-1,2-dihydro-3pyridinecarboxamide

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N-[(5-[[4-(hexylamino)-1-piperidinyl]sulfonyl]-2-thienyl)methyl]-2-hydroxybenzamide 2-hydroxy-N-({5-[(4-{[4-(trifluoromethyl)benzyl]amino}-1-piperidinyl)sulfonyl]-2thienyl]methyl)benzamide N-[(5-{[4-(hexylamino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]-2-thioxo-1,2-dihydro-3-pyridinecarboxamide 2-thioxo-N-({5-[(4-{[4-(trifluoromethyl)benzyl]amino}-1-piperidinyl)sulfonyl]-2thienyl}methyl)-1,2-dihydro-3-pyridinecarboxamide N-[(5-{[4-(butylamino)-1-piperidinyl]sulfonyl}-2-thienyl)methyl]-2-oxo-1,2-dihydro-3pyridinecarboxamide N-({5-[(4-{ethyl[4-(trifluoromethyl)benzyl]amino}-1-piperidinyl)sulfonyl]-2thienyl}methyl)-3-methoxybenzamide 4-chloro-N-[(5-{[4-({imino[4-(trifluoromethyl)phenyl]methyl}amino)-1piperidinyl]sulfonyl}-2-thienyl)methyl]benzamide 1-[(5-{[(4-chlorobenzoyl)amino]methyl}-2-thienyl)sulfonyl]-4-(hexylamino)proline ethyl 2-{[4-(hexylamino)piperidin-1-yl]sulfonyl}-5-{[(3methoxybenzoyl)amino]methyl}thiophene-3-carboxylate N-{[5-{[4-(hexylamino)piperidin-1-yl]sulfonyl}-4-(trimethylsilyl)thien-2-yl]methyl}-3methoxybenzamide  $N-(\{5-\{[4-(hexylamino)piperidin-1-yl]sulfonyl\}-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl\}-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl\}-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl\}-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]thien-2-piperidin-1-yl]sulfonyl]-4-[hydroxy(phenyl)methyl]-4-[hydroxy(phen$ yl]methyl)-3-methoxybenzamide 5-[(3-Methoxy-benzoylamino)-methyl]-2-[4-(4-trifluoromethyl-benzylamino)piperidine-1-sulfonyl]-thiophene-3-carboxylic acid ethyl ester N-[(4-chloro-5-{[4-(hexylamino)piperidin-1-yl]sulfonyl}thien-2-yl)methyl]-3-

 Use according to any of the preceding claims further comprising at least one supplementary drug selected from the group consisting of insulin, aldose reductase inhibitors, alpha-glucosidase inhibitors, sulfonyl urea agents, biguanides, thiazolidines, PPARs agonists, GSK-3 inhibitors.

methoxybenzamide

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10. Use according to claim 9 wherein said supplementary drug is selected from the group consisting of a rapid acting insulin, an intermediate acting insulin, a long acting insulin, a combination of intermediate and rapid acting insulins, Minalrestat, Tolrestat, Sorbinil, Methosorbinil, Zopolrestat, Epalrestat, Zenarestat, Imirestat, Ponalrestat, ONO-2235, GP-1447, CT-112, BAL-ARI 8, AD-5467, ZD5522, M-16209, NZ-314, M-79175, SPR-210, ADN 138, or SNK-860, Miglitol, Acarbose, Glipizide, Glyburide, Chlorpropamide, Tolbutamide, Tolazamide, or Glimepriride.

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